# Nonlinear Dynamics, Psychology, and Life Sciences: Instructions for Authors

**Your Name,**<sup>1</sup> Organizational Affiliation, [City, US State, Canadian Province, or Country], **Your co-author**, Organizational Affiliation, [City, US State, Canadian Province, or Country]

Abstract: This is the format for a journal manuscript. American Psychological Association (APA) style (6<sup>th</sup> edition) is used for all preparation points except the style of headings and subheadings, format for the title page, the use of abbreviations for "Figure" (Fig.) and "Equation" (Eq.), and a few points that are germane to this journal that are not explicitly covered by the APA style guide. This file is intended as a reference guide to help visualize the final production of your manuscript. Instructions for composing the abstract itself appear in this document under the heading for abstracts. The 2020 revisions are intended to clarify points that are frequently missed by authors and to update technical points that evolved since 2009, when the last version of this document was prepared. Any apparent conflict between APA style and this document should be resolved according to this document. If authors encounter any style points that are not specified here, APA style is the default. We are not adopting any nuances that appear in APA 7th edition at this time if they have not previously appeared in the 6th edition.

*Key Words*: [Please supply up to five keywords for indexing. See additional instructions below.]

# JOURNAL PURVIEW

Nonlinear Dynamics, Psychology, and Life Sciences (NDPLS) publishes articles that augment the fundamental ways we understand, describe, model and predict nonlinear phenomena in psychology and the life and social sciences. One or more of the following nonlinear concepts must be an explicit part of the exposition: attractors, bifurcations, chaos, fractals, solitons, catastrophes, self-organizing processes, cellular automata, genetic algorithms and related evolutionary processes, and neural networks. The broad mixture of the disciplines represented here indicates that many bodies of knowledge share common principles. By juxtaposing developments in different fields within the

<sup>&</sup>lt;sup>1</sup> Correspondence address: [give name, complete postal address, e-mail. Include telephone and fax numbers in case a production problem arises. Fax and phone will not appear in the published article]

life and social sciences, the scientific communities may obtain fresh perspectives on those common principles and their implications.

Because the journal is multidisciplinary in scope, articles should make an original contribution to at least one substantive area and should in addition illuminate issues beyond that area's boundaries. Papers, however excellent, which pertain only to an overly narrow field of interest, are not appropriate for this journal. The problem statement and literature background should be composed with the interdisciplinary nature of the readership in mind. Although it is possible to assume our readers' general familiarity with the nonlinear constructs, they are probably more variable on the background of specific application topics.

All manuscripts must be submitted in English and must meet common standards of usage and grammar. In addition, because this is an interdisciplinary journal, the introduction, at the very least, must be readable to a broad range of life and social scientists. Arcane jargon should be avoided. The scientific importance of the paper and its conclusions should be made clear in the introduction. The introduction should contain a description of the problem under study, its historical background, its relevance to psychology, life or social science, the specific phenomena which can be described or investigated, and the outstanding open issues.

Articles must make original contributions to the understanding of dynamical processes as defined above, and the exposition must be rigorous. Papers can focus upon theory, experimentation, algorithms, numerical simulation, and applications to problems in any of the foregoing substantive areas. Overly abstract papers, however, in which the application to psychology or to life or social science issues is not apparent are not appropriate for this journal.

There are four types of articles that may be submitted. The word counts mentioned below are intended as guidelines, rather than hard requirements.

- 1. *Regular articles* report original theory or empirical research usually range from 3,000 to 10,000 words.
- 2. Theoretical contributions are succinct communications detailing original insights of a theoretical nature. They typically range from 3,000 to 10,000 words.
- 3. Review articles are major overviews of domains of inquiry relevant to the study of nonlinear phenomena in psychology, life or social sciences, typically over 10,000 words. The Editor may solicit these although proposals are welcomed and should be discussed directly with the Editor.
- 4. Book, conference, and software reviews should be no longer than 2,000 words. Book reviews are summaries of content with critical observations of books on some aspect of nonlinear theory, analysis, or application to problems encountered in psychology, life and social sciences. Conference reviews should begin with a clear statement of the name of the conference, the organization(s) that sponsored it, and when and where it occurred. Once again, conference reviews contain summaries of content with critical observations of

books on some aspect of nonlinear theory, analysis, or application. Software reviews summarize of the scope and features with critical observations of software that is of interest to those who research topics in nonlinear dynamics. Book and software choices should be discussed in advance with the Editor. Reviews

Topics in philosophy of science can be considered if the subject matter can explicitly promote advancements in research and theory in nonlinear dynamical systems. Manuscripts that use developments in nonlinear dynamical systems to enlighten answers to philosophical problems or questions should be sent to journals that specialize in those subjects.

Articles involving experimentation, numerical simulations, or real-world application should be constructed in the standard four-part format: an introduction containing the problem statement and relevant literature background, method, results, and discussion remarks on the theoretical explanations for the experimental results. The INTRODUCTION should contain a concise statement of the objectives of the article and an overview of the sub-sections that are going to occur next. The literature review is typically organized in three parts: the issues in the substantive area that are being addressed in the new article, the dynamics that are involved, and the new ideas that that the author develops and tests, along with stated hypotheses.

The METHOD section should be formatted in APA style, with the following parts in order: Description of human participants or other data source, procedures of the experiment, measurements taken and used in the analyses, and an overview of the analytic procedures that were used. When describing human participants, include information about their age and gender, including the number of people who did not report age or gender. Ethnicity information should be included if ethnicity was a variable in the study.

The DISCUSSION section should begin with a summary of the results and whether hypotheses were supported, not supported, or met with mixed or surprising results. The summary should be followed by the theoretical or practical implications of the research. The next, and probably last section of the discussion should address limitations of the present study and new directions for future research. A separate section for CONCLUSIONS is optional, so long as it is not redundant with what has been said in the discussion already.

## MANUSCRIPT SUBMISSION AND REVIEW

## **Initial Submission**

Manuscripts may be submitted electronically to Stephen J. Guastello, Ph.D., Editor-in-Chief <a href="mailto:stephen.guastello@marquette.edu">stephen.guastello@marquette.edu</a>. The subject heading of the e-mail message and covering e-mail should state clearly that the manuscript is being submitted for review and possible publication in NDPLS. NDPLS follows the standard protocol of only considering manuscripts that have not been published before and are not under consideration by any other journal. The first submission of the manuscript must be in WORD or PDF format.

WORD documents must be prepared in the 2013 or 2016 version (.docx).

There is a limit on the file size for electronic submissions. Please keep the file size less than 5MB. If the file is larger, please remove the figures and send those in separate e-mail that are no larger than 5MB. Please see below for acceptable formats for figures.

Please include a cover letter designating the author to whom correspondence should be sent and providing that author's current postal address, telephone and fax numbers, and e-mail address. Postal addresses from universities and other organizations should include the author's name, department of operation, name of the institution, street address or post office box, city, state (province or equivalent), zip or postal code, and country (if not USA). This correspondence address should appear on the title page of the manuscript as well; please see below.

Authors are welcome to recommend reviewers for their manuscripts, but there is no guarantee that the recommended reviewers will be available or chosen. The Editor ultimately selects the reviewers. A request for a specific Editorial Board member is not required, however, but authors should make their recommendations in their cover letter or covering e-mail.

#### **Review Procedures**

All papers will undergo a two-part review process unless the Editor notes at once that the subject matter of the paper is not suitable for the journal; in this case it will be returned promptly to the author. Manuscripts that are considered suitable for review will be sent to the member of the editorial board and ad hoc reviewers at the discretion of the Editor. Reviewers will be selected to advise on the technical content of the paper as well as its accessibility and applicability to a sufficiently broad audience within the psychology, life and social science community. Every effort will be made to secure a decision about the paper within two months and to publish final versions of articles as quickly as possible.

Revisions may be required at the Editor's discretion. If the revision request is relatively light, the decision regarding final acceptance can be made promptly by the Editor. If the revisions are more extensive, however, the reviewers who requested the revisions are likely to review the paper a second time. In either case, authors should include a cover letter with their revised paper describing the changes that were made.

# **Final Manuscripts**

The review process concludes with a contract to publish the article in *NDPLS*. Authors are required to return the original signed copy to the Editorial Office along with any outstanding material requested by the Editor. The contract requires the authors to give assurance that the work is their own and that all permissions have been obtained from the appropriate copyright owners for material that originally belonged to other authors. The contract transfers

copyright ownership of the work from the author to the publisher (The Society for Chaos Theory in Psychology & Life Sciences). Authors will retain the right to reuse parts of their work in new forms under most types of conditions. Please refer to the *Permissions* page on the *NDPLS* web site for further details on allowable materials and conditions.

The final versions of accepted manuscript must be prepared in WORD 2013 or 2016 software. Other document types are not acceptable for this stage of production. Authors using other software are asked to transform their files into WORD. The final manuscript and figures should be submitted by e-mail to the Editor in Chief, with the same limits on file sizes mentioned above in conjunct-tion with initial submissions. Figures should be included as separate files in PNG, JPG, or TIFF formats. Alternative graphics formats may be used by prior arrangement with the Editor.

# **Page Proofs**

Page proofs are sent in PDF format to the corresponding author at the e-mail address given on the title page of the manuscript. Please compare the proofs against your original document and check the typography. Please note that minor copy-edits may have been introduced by the editorial staff, although any items that were thought to be of substantive importance are specifically cleared with the author either prior to the delivery of the proofs or brought to the author's attention when the proofs are delivered.

Corrections at this stage of the process must be limited to items of accuracy. Substantive or stylistic revisions cannot be incorporated at this time. Proof corrections should be returned by e-mail to the Editor or other journal staff person who sent the proofs whenever possible. Proof versions of *NDPLS* manuscripts are line-numbered to facilitate corrections. Authors should anticipate some copy-edits made for journal style that should not have affected the meaning of the text; please read everything carefully. List the changes in your email, with the line number and the precise change that needs to be made.

Be sure to check figures, their numbers and captions, table alignments and titles for proper placement and agreement. Proof figures may or may not show the same level of resolution as the printed final version. Technical proofs of figures are done by journal staff who will advise authors when a problem arises, although this particular aspect of production is usually done around the time the final manuscript is received from the author.

Authors are usually given five to seven calendar days for the return of the corrections to the proofs. The particular deadline will be specified at the time the proofs are sent. In the event the corresponding author is unavailable to check the proofs, the author may delegate the task to another author or to another individual on their behalf. If a reply from the corresponding author is not received by the specified deadline, however, the Journal will either move ahead with publication without the proof corrections from the author or delay publication until a later issue, at our discretion.

## MANUSCRIPT PREPARATION

Manuscripts should be submitted in the standard format as follows: double spaced type, one inch (2.5 cm) margins, on  $8.5 \times 11$  inch paper (letter size). Do not justify the right margin in your manuscript. Paragraphs should begin with an indentation of approximately 0.5-inch (1 cm).

Use Times Roman type throughout the text with the exception of the mathematical characters or characters required from a multinational font. Greek and mathematical characters should be typed directly from the Symbol font as needed to the extent possible.

The type size should be 11-point or 12-point, except in equation boxes where the type size is 10-point. Additional instructions appear below concerning preparation of mathematical notation and the construction and use of equation boxes.

Do not syllabicate words at the end of a line of type. If the complete word cannot fit on a line, let it start on the subsequent line. The final page layout for an article will inevitably require syllabication at locations that are different from locations encountered in the manuscript.

Hyphenated words are hyphenated according to standard spelling conventions in English. The word "nonlinear" is never hyphenated in *NDPLS*, however.

# Title page

The title should be concise, descriptive, and appropriate for indexing. Each author's name and affiliation should be listed. Also include the corresponding author's contact information. Provide an abbreviated title using no more than 50 characters for use as a running head. See the examples of frontpage information shown on this file. Insert a page break before the start of the abstract.

# **Abstract**

The abstract should be no more than 200 words. It should provide a summary of the problem statement, how it was studied, the main results, and the conclusions or implications. Abbreviations or mathematical formulas should not be used in an abstract. Citations should be avoided in an abstract, but when there are absolutely necessary they should follow the name-date format that is used in the body of the manuscript. be written out in full. The abstract should be constructed in one paragraph.

# **Key Words**

Please provide a list of up to six keywords describing the subject areas of the paper. Key words should appear just below the abstract on the abstract page. It is recommended that the key words should be those that do not appear in the title. A key word index for *NDPLS* appears on the *NDPLS* web site (<a href="www.societyforchaostheory.org/ndpls">www.societyforchaostheory.org/ndpls</a>) under the menu option "Indexes." Use of these terms is recommended where applicable but not required. For authors

who are accustomed to JEL numerical index terms, please convert the numbers into key words. Insert a page break after the keywords and before the start of the body of the text.

#### **Abbreviations**

Define abbreviations when they first occur in the text and thereafter use only the abbreviations. Consider the possibility that too many abbreviated terms will produce an incomprehensible manuscript except to those readers who are the most familiar with the subject matter. When in doubt on this point, use complete words.

# **Headings and Subheadings**

The convention is to center first-order headings, upper case lettering, on the line on which they are to appear using the standard 11- or 12-point type throughout. Headings should be set in boldface type. Second-order headings are centered, set in boldface type, in both upper and lower case letters. Third-order subheadings are set flush left and boldface, upper and lower case. Fourth-order subheadings appear at the beginning of a paragraph, boldface, upper and lower case, followed by a period. Do not use a numbering system for the headings or subheadings.

The first line of the introduction is usually the first-order heading INTRODUCTION. This heading is not mandatory. A different heading could be used here, or no first heading at all. For empirical studies, however, separate first-order headings for METHOD, RESULTS, and DISCUSSION are required, however.

#### Items in a Series

There are two ways of denoting a series of items in an NDPLS article. One is for short items in a list that appear all in the same paragraph. The other is for longer items that require more than a sentence of text.

For a series of short items, construct a sentence within a paragraph and separate the items with alphabetical indicators as shown in the following sentence. There are four types of articles: (a) regular articles, (b) theoretical contributions, (c) review articles, and (d) book, conference, and software reviews. Use the alphabetical indicators, not numbers (1), (2), (3), etc. The alphabetical indicators are not necessary if the items in the list consist of only a few words each, but sometimes the author wishes to draw attention to the categorical nature of items under discussion.

For series that involve more than one full sentence of text, the numbered paragraph style should be used as shown below. Please note that *NDPLS* does not use bullet constructions or additional indentations. Be sure to turn off the autoformat function or use the *undo* button on your word processor if the autoformat is interfering with standard formatting. For an example, see the formatting for the description of the four types of articles appearing earlier in this document.

# Acknowledgments, Footnotes, and Endnotes

Technical assistance and advice should be acknowledged in a separate section at the end of the text before the references. Use a first-order heading, ACKNOWLEDGMENTS. The acknowledgments section should identify any grant or funding sources that made the research article possible, if any.

*NDPLS* uses endnotes instead of footnotes, and they should be kept to a minimum. Try to incorporate the material into the text, perhaps with the assistance of parentheses. When they are still required, however, endnotes should be prepared as follows: (a) Use a superscript numeral in the text to indicate where the endnote should be read. The numbering is consecutive throughout the manuscript and does not include the number that is associated with the author's correspondence address.

The endnotes themselves appear after the acknowledgments and before the reference list. Start the section with a first-order heading ENDNOTES. Each endnote is typed as a separate paragraph. Each paragraph containing an endnote begins with a superscript numeral that corresponds to the numeral in the text.

## References in the Text

References follow the most current standards of the American Psychological Association. This is a requirement. Please note that all references mentioned in the text must appear in the reference list, and all items in the reference must be mentioned in the text. Do not abbreviate names of journals.

For citations in the text, use the name-date convention, and not the bracketed numerals (e.g. [1]), or footnotes. For instance,

According to Aks and Sprott (2003) ...

Or alternatively,

The idea that mental functions are regulated by the laws of chaos and self-organization is receiving strong support (Gregson, Campbell, & Gates, 1992; Marks-Tarlow, 1999).

Note that the word "and" is placed between authors' names in the straight text method, whereas the ampersand is used in the parenthetical method. Multiple references are ordered alphabetically by first author and separated by a semicolon. In the case of five or more authors, all names are mentioned the first time that the reference is cited. On the second and subsequent citation of the same work, the "et al." convention is used. The previous example would then look like this:

(Gregson et al., 1992; Marks-Tarlow, 1999).

Note the placement of commas after the name occurring just before a date, and the period in the "et al." convention. In the case of six or more authors, the "et al." convention is used on the first and subsequent citations of the work.

For two or more references to the same author group, the names are

given once and are followed by the publication dates. A comma separates publication dates. The sequence ends with either a semicolon, which is followed by another author, or a closed parenthesis to end the citation sequence. For example:

(Kauffman, 1993, 1995; Wolfram, 2002).

When two or more references are given in the same location, as in the two examples above, the citations are ordered alphabetically by first author, not ordered by date.

If a web site is referenced, use the name-date convention there as well. Do not include the URL in the text in place of a reference; the URL will appear in the reference in the reference list. If the author is an organization instead of one or more individuals, give the organization's name as the author. If there is no specific date on the material that you are citing, use the date of the last update if it is available. If the date of the last update is not available, use the year in which you retrieved the information.

## **References in the Reference List**

The list of references should start on a new page. The five most commonly used varieties of references are the journal article, book, book chapter, conference paper, and web site. Where there are two or more references in the list that have the same first author, the first author's name is repeated with each reference and is not substituted by "----". An example of a reference list appears at the end of this document.

Note that references in the reference list are not numbered. Each entry is hang-indented by 0.5 inches (or 1 cm.). There are no blank lines between references in the list. Every reference in the list must be explicitly cited somewhere in the body of the paper.

# **Article Example**

Guastello, S. J. (1988). Catastrophe modeling of the accident process: Organizational subunit size. *Psychological Bulletin*, 103, 246-255.

Note the placement of parentheses around the date, and the different usage of initial capital letters on the title compared to the journal name. Only the first word of the title and the first word in a subtitle (follows a colon) contains an initial capital. All principal words in the journal's name contain an initial capital. The volume number and inclusive pages for the chapter follow the journal name. The issue number is only used when citing a publication that begins each issue with page 1. The journal title and volume are italicized. There are no quotes around the article title or other elements. The journal name is spelled out in full and not abbreviated. See the example for a book chapter below for formatting names of multiple authors.

# **Book Example**

Puu, T. (2000). Attractors, bifurcations, and chaos: Nonlinear phenomena in economics. New York, NY: Springer-Verlag.

Again note the use of initial capital letters in the title. The title is followed by the edition number in parentheses (only if there is more than one edition) and a period. Next follows the city of publication, US state or country, colon, and publisher. This format is also used for other stand-alone documents, such as a technical report.

If an edited collection is cited in its entirety, the editors' names appear where the authors' names are shown in the example, "(Eds.)." appears after the last author and before the date element. The title, city, and publisher are shown the same way as for an authored book.

# **Book Chapter Example**

Sabelli, H. C., Carlson-Sabelli, L., Patel, M., Levy, A., & Diez-Martin, M. (1995). Anger, fear, depression and crime: Physiological and psychological studies using the process method. In R. Robertson & A. Combs (Eds.), *Chaos theory in psychology and the life sciences* (pp. 65-88). Mahwah, NJ: Lawrence Erlbaum Associates.

The format for a reference to a book chapter is: authors, date, period, title, period. The next sentence begins with "In" which is followed by editors' names, "(Eds.)," book title, inclusive page numbers for the chapter; chapter page numbers appear in parentheses with the "pp." prefix, followed by a period. The last elements are city of publication, US state or country, colon, and publisher.

# **Conference Paper Examples**

If a conference paper is published in a proceedings volume, and the proceedings for the sponsoring organization is issued every year, the paper should be cited as a journal article:

Waterson, P., Baber, C., Golightly, D., Hancock, P., Morineau, T., Guastello, S. J. ... Drury, C. G. (2019). The cybernetic return in human factors/ergonomics. *Proceedings of the Human Factors and Ergonomics Society*, 63, 894-898.

If the published proceedings volume is not published every year, not yet published every year in the case of new enterprise, or given specialized titles each time it is published by a sponsoring organization, it should be referenced as a book chapter with the editors' names in the usual location. Note that Springer publishes numerous books of this type that are based on conferences:

Guastello, S. J., Marra, D. E., Correro, A. N. II, Michels, M., & Schimmel, H. (2017). Elasticity and rigidity constructs and ratings of subjective workload for individuals and groups. In L. Longo & M. C. Leva (Eds.),

Human mental workload: Models and applications (pp. 51-76). Cham, Switzerland: Springer.

If the citation to a conference paper is based on the live presentation, and full-text proceedings are not published, or not published yet, use the format for a live presentation:

Mpitsos, G. (2002, August). Attractors: Architects of network organizations. Paper presented to the 12th annual international conference of the Society for Chaos Theory in Psychology & Life Sciences, Portland OR.

Note that the month is inserted after the year in the date element. The title of the paper is italicized in the manuscript, but not the conference name. The conference name is followed by the city and state or country in which it occurred.

# Web Site Example

Liebovitch, L. S. (2003). *Introduction to chaos*. Retrieved January 16, 2009 from www.societyforchaostheory.org/tutorials/00002/PPc.ppt.

The title is italicized. The same convention for initial capital letters is used here as it is with books and articles. The title is followed by "Retrieved," the date of retrieval, "from" the exact URL.

# **DOI Numbers**

DOI numbers are optional for references to journal articles that have all the usual volume and page numbers. If a journal is published online only and it does not use standard page numbers, provide the article number (which is the usual substitute for page numbers) and DOI number:

Burgess, A. P. (2013). On the interpretation of synchronization in EEG hyperscanning studies: A cautionary note. *Frontiers in Human Neuroscience*, 7, 881. doi: 10.3389/fnhum.2013.00881

The same is true for book chapters that are published with separate DOI numbers for each chapter. If, however, the authors of the manuscript for NDPLS use the option to include all DOI numbers, they should be included for all publications that have them.

Web addresses for journals should only be included if the journal is published online only and does not have standard inclusive page numbers or DOI numbers. URLs for book publishers should not be included, nor should abstract and retrieval services (e.g. Proquest) be part of the reference.

# Citing a Work with More Than Seven Authors

There are five authors in the example for a book chapter. Note the placement of periods and commas with the authors' initials. If there are seven or fewer authors, the last author is preceded by an ampersand (&). If there are eight

or more authors, list the first six followed by an ellipsis (...), which is followed by the last author. The formatting for authors' names applies to all types of citations in the reference list.

#### **Tables**

Number tables consecutively in order of appearance. Each table must have a title appearing above the tabular material. Table titles begin with the word "Table" followed by the table number, followed by a period. The table title continues on the same line and should be brief and descriptive. Table titles use initial capitals on principal words in the same fashion as they would be used for a book title in an ordinary text.

Symbols and abbreviated units of measure referred to in a table must be explained in a note appearing below the table. Use superscript letters to identify table notes, symbols, and abbreviations. All tables must be cited in the text. Please use as few horizontal rules in the text as possible; journal production staff may insert some where needed. Do not use vertical rules. Tables should be aggregated to the end of the article following the references. Each table should occupy a separate page of the manuscript.

A flag indicating the preferred placement of the table should appear in

**Table 1.** Correlation Matrix of All Variables (from Harbourne, Deffeyes, Kyvelidou & Stergiou, 2009, p. 134. Reprinted by permission of the Society for Chaos Theory in Psychology & Life Sciences).

2	3	4	5	6	7	8	9	10
1 RMS_AP .77*	.98*	.77*	.17	04	59*	44	.02	.28
2 RMS_ML	.77*	.97*	.08	14	47*	67*	.16	.07
3 Range_AP		.80*	.10	.01	54*	40*	.08	.36*
4 Range_ML			.07	10	43*	60*	.19	.13
5 Sway_Path				.45*	.09	04	.02	17
6 Frequency					.20	03	10	.01
7 ApEn_AP						.62*	.46*	.06
8 ApEn_ML							.13	.29*
9 LyE_AP								.60*
10 LyE_ML								

<sup>\*</sup>p < .05, two tailed.

the text, preferably at the end of the paragraph where the table is first mentioned. An example appears below. Please remember to use the UNDO AUTOFORMAT in WORD when making these horizontal rules.

Insert Table 1 About Here

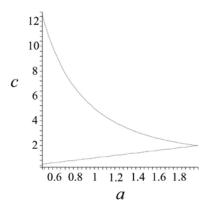
An acceptable alternative table flag is:

<<Insert Table 1 About Here >>

Follow the APA guidelines or other standard reporting practice for what statistical data in a table or the running text and how to report them. Of particular importance, give the value of the statistic, not simply the p-value (significance level). Indicate p-values in a table with one or more asterisks that correspond to the note that is placed below the table, such as " \*p < .05." Categorical levels of significance or exact continuous values may be used in the running text.

Numerical values in the tables or in the text should be rounded to two decimal places whenever possible. It is understood that there are sometimes values that are interesting in the third or later decimal place, and thus some variation from the two-digit standard is acceptable should that be the case. Please be as consistent as possible throughout the article when applying a rounding level.

Whenever possible, tables should be formatted vertically and no wider than 4.5 inches (11.4 cm). For tables that absolutely must be formatted sideways, the table should be prepared to be no wider than 6.75 inches (17.1 cm) and no taller than 4.0 inches to leave sufficient room for the table title. It is recommended that the author prepare the tables using 10pt Roman type and single spacing to be sure that the table fits the print dimensions.



**Fig. 1.** The graphs of c = a and c = a - 4 + 8/a (from Baesner, Brooks, Radin & Wiandt, 2007, p. 39. Reprinted with permission of the Society for Chaos Theory in Psychology & Life Sciences).

# **Figure Captions**

All figure captions should be printed on a separate page and placed directly following the tables. All figure captions should be on the same page to the extent possible. The figure themselves are placed at the end of the manuscript itself and should be labeled as "Fig. #" above the figure on the page. Figure captions should *not* be part of the figure files themselves.

# **Figures**

## General

The location of figures should be with a flag at the end of the first paragraph in which the figure is mentioned. The text must make an explicit mention of each figure as it does with tables. When referring to a figure in the text, use the syntax "... as shown in Fig. 1;" note the abbreviation "Fig." If the word "figure" starts a sentence, spell out the word "figure": "Figure 1 shows ..."

Insert Figure 1 About Here or <<Insert Figure 1 About Here>>

All figures should be consecutively numbered with integers. If a figure is composed of two or more parts, the labels (a), (b), etc. may appear on the parts, but the entire figure is identified as one unit with one caption that is detailed as necessary. The caption should identify the parts of the figure.

Each figure should occupy a separate page, without the captions, but with all internal lettering and labeling in place. Figures should then be aggregated to the end of the manuscript following tables if any, and the page of figure captions.

Illustrations should be of professional, camera-ready quality (dark, sharp, and clear), including the labeling. All illustrations must have captions, see above. Symbols and abbreviated units of measure must be explained in the caption. All figures must be prepared for publication in electronic form; the descriptor "camera-ready" is admittedly archaic, but it does convey they we need the figures in final, ready-to-use form. Use a separate file for each figure.

Authors are cautioned against overly-fine detail that is sometimes produced from computer-based media; there is point beyond which the fidelity of reproduction is not guaranteed. Importantly, the size of lettering, such as names on axes of graphs should be large enough relative to the remainder of the image so that the figure can withstand a size reduction. The printed portion of a journal page is 4.5 inches (11.4 cm) wide and 6.75 inches (17.1 cm) high including the caption. Horizontal orientations of the images should be avoided whenever possible. When in doubt, make a print of the image in a size not larger than the specifications above and see how it turns out. The image quality obtained from a laser printer is approximately the same as the resolution of *NDPLS* in print.

# **Use of Color**

The *NDPLS* will, to a limited extent, publish articles that contain color figures. The journal will support articles containing color graphics only if the color figures convey information that cannot be conveyed in a grayscale production. In the case of line graphs, use different styles of lines (e.g. solid, dashed) or different markers on values (\*, •,  $\Delta$ ,  $\Box$ , •) *NDPLS* does not support the decorative use of color, however. Do not use color or gray-shaded background

on line graphs and bar charts. The usual requirements for sharpness and clarity apply to the production of color graphics for the Journal. In addition, we recommend that colors be chosen to maximize contrast whenever possible, especially where fine details are involved.

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Brief and simple equations may appear in the running text or as display equations that occupy a separate line of type. Longer and more complex equations should be rendered as display equations. Stacked equations in running text should be kept to an absolute minimum. Idioms such as "dy/dt" should be rendered in horizontal format rather than stacked format. Exponents and subscripts are permissible in running text, however.

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So ingrained was the linear habit, that by the 1940s and 1950s many scientist[s] and engineers knew little else . . . [W]e live in a world which for centuries acted as if the only animal in existence was the elephant, which assumed that holes in the skirting-board must be made by tiny elephants, which saw the soaring eagle as a wing-eared Dumbo, [and] the tiger as an elephant with a rather short trunk and stripes (p. 83-84).

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# ACKNOWLEDGMENT

The Editor wishes to thank the members of the *NDPLS* Editorial Board and the SCTPLS Publications Committee for their helpful suggestions regarding these Instructions. In normal circumstances, one does not thank the Editor. It is sometimes appropriate to thank anonymous reviewers if they made particular contributions to the final work through their reviews.

# **ENDNOTE**

<sup>1</sup>An endnote would look like this. Each endnote should start on a separate line and indented as with ordinary paragraphs.

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