**Appendix 1: Summary of key papers on the unimodel versus dual-process models**

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| **Author(s)** | **Embraced School (single- vs. dual- process)** | **Main focus/contribution** | **Main ideas/issues identified in the paper** |
| Ajzen (1999) | Dual | The usefulness of the qualitative distinction between processing modes. | -The experiments reported by Kruglanski and Thompson do not conclusively prove that variations in information complexity, length, and ordinal position are responsible for the observed effects of peripheral versus central information.  -The unimodel's findings regarding the significant effects of source expertise in low- and high-involvement situations are not inconsistent with the findings of dual-process models.  -Processing peripheral cues and message arguments in the same manner does not necessarily invalidate the distinction between different modes of processing.  -The qualitative distinction between processing modes is critical for understating the attitude change phenomenon. |
| Bohner and Siebler (1999) | Dual | The usefulness of distinguishing between different classes of information and different modes of processing. | -Dual-process models revolve around cognitive effort rather than the mere ‘argument–cue’ distinction.  -Whereas the unimodel's data suggest only a single class of information (i.e., ‘persuasive evidence’), dual-process theories can accommodate the same data as supporting the distinction of different information classes (e.g., easy to process vs. difficult to process; general vs. specific; controlled vs. automatic).  -The unimodel's notion of ‘persuasive evidence’ does not reduce the number of information classes and thus does not contribute to its purported parsimony.  -The unimodel accounts for only one cognitive operation (syllogistic reasoning) and ignores serval other cognitive operations. |
| Chaiken et al. (1999) | Dual | Major aspects of the unimodel's analysis of dual-process theories and their theoretical assumptions are incorrect. | -From an ecological view, contrary to the unimodel's assertion, heuristics and message arguments differ systematically in length or complexity.  -Information type and processing style should not be confounded: The unimodel's assertion that the ‘heuristic–systematic’ distinction boils down to a distinction between types of information is mistaken.  -Independency of information types and processing modes: A heuristic cue can be processed systematically and systematic information can be processed heuristically.  -Kruglanski and Thompson fail to consider fundamental differences in the nature of heuristic and systematic processing (e.g., automaticity, consciousness, consequences).  -The unimodel perspective obscures many fundamental and important differences between two modes of processing that are clearly distinct from one another. |
| Eagly (1999) | Dual | Nested persuasive messages should not be confounded with confounding informational parameters (e.g., length, complexity). | -In their long version of the information about source expertise, Kruglanski and Thompson did not provide a cue at all, but instead conveyed expertise through a set of arguments.  -Combining lengthy source information (e.g., expertise) with message-issue arguments represents the case of a nested persuasive argument (rather than a way to control for a length or complexity confound).  - Dual-process models offer a sound theoretical framework for understanding the persuasive effects of nested messages. |
| Kerkhof (1999) | Single | Comparing the predictions of the ELM versus the unimoldel in a political context. | -In political persuasion, cue information, delivered to the citizens, is more lengthy and complex than message arguments.  -The unimodel accounts for the ‘mainstream effect’ in political persuasion (i.e., cue information influence the attitudes of politically aware citizens). |
| Lavine (1999) | No particular position has been taken | Proposing experiments and ideas that could provide more powerful tests of the propositions of single- versus dual-process models. | -A stronger test of the unimodel would involve manipulating distinct information parameters (e.g., length, complexity, and relevance) and motivation to process along with both a cue and a message quality manipulation.  -The most critical area in which to test the unimodel's functional equivalence hypothesis is to evaluate the extent to which attitude persistence, resistance, and consistency with behavior are driven by elaboration per se (as the unimodel proposes) or the elaboration of message arguments (as the dual-process models would seem to suggest). |
| Manstead and van der Pligt (1999) | Dual | Conceptual and methodological flaws in the unimodel framework. | -Contrary to the unimodel's assertions, it is not appropriate to conclude that there is no systematic difference in the length, complexity, and ordinal positions between peripheral/heuristic cues and message arguments.  -The depiction of source information as short, simple, and early in dual-process models reflect natural confounds in real-world situations rather than experimenter-created confounds that generate artifactual findings as it was the case in the experimental work testing the unimodel.  -The experimental work adopted for the unimodel testing is flawed in that it seems to favor the impact of source information (sheer extensiveness of the source information).  -Demonstrating that source information can be too processed thoroughly, similar to a message argument, does not necessarily mean that there is no need to distinguish between different modes of information processing. |
| Miller and Pedersen (1999) | No particular position has been taken | Methodological approaches to testing process uniformity or distinctiveness. | -The experimental work and statistical analyses used in testing the unimodel preclude assessment of the discriminant validity of the processes alleged by dual-process models.  -From an ecological validity view, the unimodel's assertion that peripheral cues and argument need not to be different is incorrect. |
| Romero (1999) | No particular position has been taken | Offering a caveat to the argument of the unimodel's functional equivalence by demonstrating one factor (i.e., logical structure) on which source information and message arguments differ. | -Making conclusions based on the logical forms of message arguments and source information are both two-step processes.  -Source information and message arguments do not share the same logical structure.  -The distinction between the logical structures of source information and message arguments represents a fundamental difference between the two forms of information.  -Contrary to the unmiodel's claim, both types of information are not mediated by an ‘if–then’ syllogistic reasoning. |
| Strahan and Zanna (1999) | No particular position has been taken | Proposing experimental designs to distinguish information content from processes. | -For further unimodel testing, there is a need to rely on more refined experiments in which source information, message argument, length, complexity, and ordinal position should be all manipulated simultaneously.  -The unimoldel's experimental work does not allow one to unequivocally state that content (i.e., source and message variables) per se is irrelevant in a persuasive communication. |
| Stroebe (1999) | Single | Theoretical contributions and practical relevance of the unimodel. | -The unimodel is more parsimonious than dual-process theories.  -The central and peripheral information in dual-process models are special cases (rather than different species) because both types of evidence can be evaluated in terms of the same syllogistic reasoning.  -Although drawing on more general theoretical principles, the unimodel's predictions are not dramatically different from those derived by dual-process models.  -Dual-process models have more practical relevance than the unimodel: The operationalization of ‘peripheral’ or ‘cue’ information is more realistic in dual-process studies in comparison to the unimodel's experiments. |
| Wegener and Claypool (1999) | Dual | The unimodel's misconception about the ELM | -Associating the Laswellian partition (i.e., the distinction between source and message variables) with the ELM is not appropriate.  -All the unimodel's findings are actually quite compatible with the ELM. |

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