## Don Kuiken and Arthur M. Jacobs

## **Introduction: Reflections and Prognoses**

Chapters in this handbook review an array of concerted efforts to extend the reach of empirical methods and theoretical models so that they accommodate the complexities of literary reading. The term "reading," however, is becoming an anachronism. While the mandate of the *International Society for the Empirical Study of Literature (Internationale Gesellschaft für Empirische Literaturwissenschaft; IGEL*) is to facilitate the application of scientific methods in studies of the structure and function of literature, literature is broadly defined as all cultural artefacts that embody literary devices (e.g., stylistic variations). Thus, the target domain includes not only novels, short stories, and poetry, but also theatre, film, television, and some digital media. The diversity of what is considered literary in this sense is evident in chapters that focus on entertainment media (e.g., film; Oliver et al., this volume; Khoo, this volume). Recent extensions to digital media are also apparent (e.g., Kuijpers et al., this volume; Herrmann et al., this volume). (Theater and opera are, for some reason, not represented at all.)

More challenging, perhaps, than extending empirical methods to diverse cultural media is the *IGEL* mandate to examine the aspects of cultural (literary) media that have an aesthetic function. Especially resistant to empirical study are the relations among narrative genre, stylistic variations, and figurative language. The stance that pervades contemporary research is a version of pluralism, which allows that genre, style, and figuration potentially serve more than one function (e. g., Jakobson, 1960), although whether those functions are inherently integrated (Halliday, 1973) or separately operative is controversial (Hakemulder et al., this volume; Kuiken & Sopčák, this volume). Within these controversies, neo-formalist theoretical developments involve extensions and reformulations of earlier formalist positions (e. g., Shklovsky, 1917/2017; Jakobson, 1960).

Equally challenging is articulation of the *aesthetic* effects of this range of literary artifacts. Increasingly, the multi-dimensionality of aesthetic effects is being addressed in multi-variate studies (Schindler et al., 2017) – often supported by powerful computational methods (Jacobs, 2018). There is increasing use of psychometric methods that systematically address the complexities of construct validation, including not only conventional scaling procedures (e. g., exploratory factor analysis) but also confirmatory factor analysis (including bifactor modeling), structural equation modeling, and the non-linear potential of

neural network models. These methodological advances are unevenly represented in the IGEL community, but that has begun to change (see Herrmann et al., this volume; Kuijpers et al., this volume; Lüdtke et al., this volume).

There is widespread agreement that progress in construct validation requires multimethod cross-validation (Jacobs, 2016). On the one hand, an increasing range of studies combines measures that are "close" to aspects of reading experience (e.g., self-report measures) with theoretically relevant behavioral or physiological measures (e.g., eye movements, Lüdtke et al., this volume; neuroimaging (fMRI), Mak & Willems, this volume). These multimethod studies often address convergence between a selected theoretical construct (e.g., feeling "moved") and other separate but theoretically relevant constructs (e.g., piloerection). These studies less often address convergence between two or more measures of the same theoretical construct (e.g., two or more measures of "absorption") within a single sample of readers and texts (see Kuijpers et al., this volume). Empirical articulation of individual constructs, then, requires multimethod approaches that address the validity of selected theoretical constructs (Slaney, 2017).

A corollary component of construct validation is the requirement of not only convergent validity (e.g., theoretically predicted correlations between eyemovements and self-reported attention) but also discriminant validity (e.g., minimal correlations between reported reading pleasure and socially desirable responding; Kuiken, 2016). Although discriminant validity may not receive as much attention, such neglect has a cost: theoretically discriminating correlations potentially highlight alternative – and perhaps competing – theories. Throughout this volume, systematic comparison of the empirical implications of alternative theories of literary reading is quite rare. Investigators seem reluctant to articulate competing theoretical models to a level that enables contrasting predictions, although there are smoldering embers within these pages (e.g., Bruhn, this volume).

Rather than focusing on clearly articulated theoretical comparisons (e.g., Mak & Willems, this volume), research within this community continues to be theoretically expansive. Expansion includes extension of familiar theoretical models to novel domains (e.g., educational settings; Hakemulder et al.); the extension of empirical efforts within under-represented research areas (e.g., child development; Kucirkova & Kümmerling-Meibauer, this volume); and broadening the range of applicable empirical methods, including both quantitative methods (e.g., eye movements, Lüdtke et al., this volume; computational text analyses, Herrmann et al., this volume) and qualitative methods (e.g., microphenomenological interviews, Billington et al., this volume; poetic autoethnography, Hanauer, this volume).

Fruitful continuation of this expansive trend requires further integration of models and methods that derive from such different fields as literary studies, phenomenology, cognitive psychology, and cognitive neuroscience. There is still no theoretical model with sufficient breadth and precision to predict, for example, how specific experiential constructs are related to specific behavioral or physiological measures. Promising movement toward the use of behavioral measures (especially as outcomes of literary engagement) is evident in studies of literary reading and attitude change (Appel et al., this volume), entertainment choices and health-promoting behavior (Khoo, this volume), narrative engagement and objective indicators of empathy (Black et al., this volume), and identification and diminished counter-arguing (Tukachinsky, this volume). However, increased efforts must be dedicated to the development of quantitative models that accurately predict both direct experiential and indirect neuronal and behavioral measures by using, for example, advanced computational methods like sentiment analysis (Jacobs et al., 2020).

Perhaps less noticed within an increasingly diverse research domain is the continuing (but not simply incremental) clarification of the basic processes of literary engagement. Recent studies indicate increasing precision regarding the multileveled linguistic sources of the sonority and semantics of literary reading (Blohm et al., this volume); the interactive effects of task, text, and reader on distinctively literary interpretation (McCarthy et al., this volume); and the meanings that emerge from poetic metaphors (Glicksohn & Goodblatt, this volume). These contributions may not seem startling - unless read closely and in relation to rich scholarly and research traditions that derive from linguistics, cognitive science, and literary theory.

To facilitate development in this research domain, it will be important to develop publically available databases that provide both ecologically valid literary test materials and open-access reader response data. As is already the case in other scientific fields (cf. Hanauer et al., 2017), development of these resources would encourage series of studies in which literary texts are repeatedly examined – almost certainly with freshly developed empirical procedures. These databases would support the development of a collaborative community in which researchers interact with one another in common pursuit of jointly selected empirical problems. Moreover, these shared empirical problems would potentially support interaction at professional meetings and between both students and faculty from different institutions.

Chapters within this volume - some of which already testify not only to transdisciplinary integration but also to community collaboration – are organized in a manner that invites exploration of intellectual "kinship." Readers are encouraged to begin by reading a chapter in which the focal research topic is near the core of their intellectual life in this area – but then to go on by reading the chapter that precedes it and the chapter that follows. As you get acquainted – and branch out across chapters of interest, you may be in an even better position to appreciate the rich history of empirical studies of literature (Salgaro, this volume) – and perhaps to locate yourself within this still unfolding research community.

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