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The humor transaction schema: a conceptual framework for researching the nature and effects of humor

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Abstract: This article presents a schema describing the 'humor transaction,' that is, the processes by which what is generally called humor is created, communicated, experienced, responded to and used. It describes in three stages the rich creative process shared between a humorist and an audience. This starts with the perception and/or formation of an amusing stimulus by a humorist and passes in a second stage to its communication by the humorist to others and their processing of the stimulus. The third stage captures the range of experiences and responses by the recipient/s, including personal consequences and possible re-use of the humor (which creates further functions and consequences). Although experiencing and using humor are both holistic processes, dependent on synchronization of social behaviors by humorist and recipient, the schema simplifies in order to summarize the general outline of a typical shared humorous 'transaction' while allowing for complex detail within each stage. It offers a framework within which scholars and practitioners can locate their different foci of research and application. It aims to assist in developing a shared vocabulary of concepts and terminology to foster exchange across the many disciplines involved in humor research. It provides a linked glossary of relevant terms designed to facilitate interdisciplinary exchange in studying humor.

Keywords: humorist; humor production; humor styles; humor theory; humor use; individual differences

1 Introduction – why a schema?

This theoretical position paper is not a conventional report on research, although it adopts a theoretical and interdisciplinary standpoint. It aims to capture the overall

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shape and sequential stages of an individual humorous episode by describing the respective roles of the person creating and/or using the humor—here called the HUMORIST—and of the HUMOR RECIPIENT or audience (for definitions of these and other terms given in small capitals the first time they appear in this text, see the Glossary, Appendix A), as well as the environment in which that HUMOR is created and exchanged. Schematically describing this as a humor transaction between humorist and audience offers a frame of reference for organizing the large and disparate research literature about humor, and a vocabulary that is hopefully relevant for humor scholars across many disciplines and methodologies. The article does not seek to define what makes humor funny (an impossible task) but rather to identify the relationships between disparate research studies that focus on different stages and aspects of the humor transaction. By indicating which of the three stages of creating, experiencing and using humor are more malleable and thus open to training on the part of humorist and/or recipient, it may also throw light on humor applications such as the creative comic arts and humor interventions in health, personality and management. Given the nearly infinite variety of types, forms, functions and uses of humor, the schema may of course require further adaptation to embrace instances of humor that the authors have not considered; but the present version is offered as a model that is sufficiently flexible to include adaptation and amendment, particularly when adding further detail to the very general categories here put forward. Naturally, the model reflects the present authors' current thinking and their particular cross-disciplinary collaboration and is open to further refinement.

The field of humor studies now embraces innumerable academic disciplines and research methodologies. Contributions come from neuroscience, cognitive and social linguistics, literary and performance studies, sociological, cultural and historical investigations into forms and conventions of humor and laughter, studies of links between humor and religion, philosophy, play, aggression, political protest and resistance, the law, management, human suffering, health and survival, as well as psychological studies of humor as a personality characteristic, and of the emotion of amusement, its expression and social functions and consequences. It is difficult if not impossible for any one person to read across the whole field. Nevertheless, many scholars have pointed to the value of trying to cross bridges (e.g., Raskin 2008). The present authors combine very different perspectives (Milner Davis the humanities and education and Hofmann psychology). Appendix A extends this approach with a glossary of relevant humor research terms. This sets out briefly our understanding of some key terms in humor studies and how they are currently used and also provides a checklist of terms specific to this schema. It is designed as a resource to assist beyond illuminating the schema by promoting a more unified approach to studying humor and overcoming some current differences in usage (e.g., between psychology and literary studies).

2 The concept of humor

The term humor is used here in its broad umbrella sense to indicate all types of AMUSEMENT and humor-related behaviors including what provokes such behavior (e.g., Attardo 2010: 7–8; Roeckelein 2002). This is not an adequate definition of humor, and moreover jumbles up what is humorous with the experience of humor, but it is at least clearly distinct from the term's narrower meaning as a particular and genial type of humor (often associated with Englishness, see for example Noonan 2011). The schema's concept of humor is informed by Alexander (2004) who combined sociological and theatrical perspectives to describe humor as a performance rather than as a static presence on a page or in spoken language. It also relates in part to the Aristotelian scholarly tradition that examines language as a form of action centered on relationships between speaker/writer and audience. However, while speech act theory (Austin 1962) relates to this in that it models the analysis of performative speech acts, even its modern versions make little allowance for the role played by the interpreter of a humorous text (Attardo 2020: 215–6). More relevant here is Aristotle's (1970) own concept of persuasive rhetorical discourse. This readily expands from the logos (meaning the word, but also reasoning) to include other communicative sign-systems such as visual and performed humor, which are important modalities for humor research.

In fact, the interchange between performer and recipient in humor is central to the schema. The term 'transaction' rather than 'exchange of humor' (adopted by other scholars who have focused on this interchange, e.g., Kuipers 2015) is used here for a number of reasons. While humorist and humor recipient are equally important to humor, their roles differ in nature but may switch back and forth. Although the humorist's role may be creative and initiating, the recipient's responsive role can still be determinative, quite capable of 'killing' the humor. For many reasons, some discussed below, not all humor succeeds. Norbert Elias has described social life in general as a delicate and collaborative dance (1978: 262). While humor in particular is similarly experienced as a shared collaborative moment (occasionally communing with oneself alone), it is not always impromptu and frequently involves preparation and rehearsal by the humorist. The concept of a transaction accommodates not only the two participants' differing roles but also the sequential nature of most humorous episodes.

3 Schema overview

Our approach to the humor transaction adopts a linear action model of creation, communication and outcomes. Informed by educational research that maps human

ability (potential) into achievement (performance) (Gagné 2004), its first stage makes a key distinction between humor potential elements and actual HUMOR PRODUCTS. Similarly, its next stage distinguishes between the processes of HUMOR CREATION and HUMOR COMMUNICATION; and then between HUMOR RECIPIENT RESPONSES and subsequent HUMOR OUTCOMES. It thus identifies three broad stages in the overall humor transaction. Elaborating each, it adds a range of modifying PERSONAL AND ENVIRONMENTAL FACTORS for humorist and recipient. Communication models that relate to this approach include Lasswell's (1964) '5W' model and, more specifically, the outline for the impact of humor use proposed by Wood et al. (2011), informed by Bandura's (1986) work on social modelling. The schema's three stages are presented graphically in Figure 1, which is summarized below, and then fleshed out in greater detail in the correspondingly numbered Figures and discussions that follow.

Humor starts with elements or components of the physical or imagined world which come to the attention of a humorist. Not necessarily humorous in themselves, these nevertheless form HUMOR POTENTIAL. Through the agency of the humorist, they become a humorous creation or a HUMOR PRODUCT (in psychology also termed a HUMOR STIMULUS) available for use by the humorist (and others). This process may occur spontaneously, or elements may be selected, combined and refined by the humorist. When humor products are simply provided by real-life occurrences that somebody notices and finds amusing, that person acts as both humorist and humor recipient.

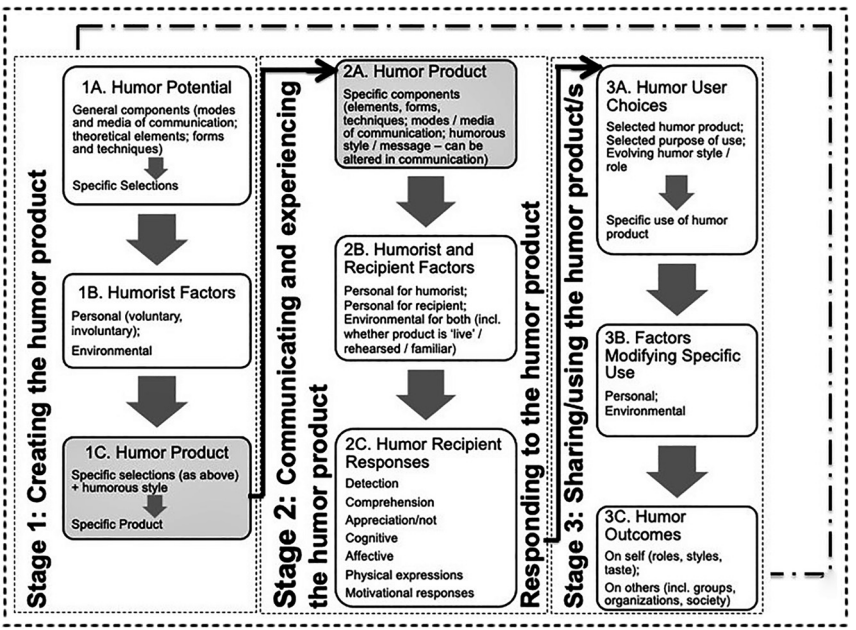

Figure 1: The humor transaction schema.

Humor products take many shapes, possess many aesthetic styles, are directed at many different targets and convey many different messages, some positive, some not (whether intentionally so or not, see Section 4.2 below). In Figure 1, this process constitutes 'Stage 1: Creating the humor product'.

Whether perceived or created, humor products serve many different functions, can be used by humorists for many different purposes and are capable of eliciting a wide range of emotional, cognitive, motivational and behavioral responses in others. The dual processes of communicating and experiencing the humor are captured in Figure 1's 'Stage 2: Communicating and experiencing the humor product.' After a response (itself a multi-stage process), the recipient may turn humorist and communicate the same or another humor product to new audiences, including replying to the original humorist as in banter or joke-telling sessions. Here again, many different purposes and functions apply with a range of impacts and effects, both narrowly on humorist and recipient and more widely on society at large, some positive, some not. This sequence of processes is summarized in 'Stage 3: Sharing/using the humor.' As noted above, not all humor products are communicated to others and may just be enjoyed by the humorist who perceives or creates them and never retold, thus abridging the stages of the schema. But since humor is essentially a social activity shared with others (Bergson 2005 [1910]; Kuipers 2009), the schema provides for the more common case in which sharing occurs so that the humor transaction progresses through all three stages.

Personal and environmental factors for both humorists and humor recipients affect all stages of the creation, communication, reception and re-use of humor. The schema provides for two major classes, termed personological and environmental. While there is overlap between these—often explored in sociological and linguistic studies of humor—the dual terms are employed here for simplicity. The schema does not aim to present exhaustive lists of various factors, for example naming all the elements necessary and sufficient to create humor or all those that affect its communication and comprehension. Rather, it identifies broad categories and a few important sub-categories into which such elements and factors most likely fall. It is an enormous simplification of a complex human experience, and, in humor as in life, the undescribed spaces in between categories and stages are often the most significant in shaping outcomes.

Research concerned with the creation, theory, nature and types of humor is likely to focus on Stage 1. This includes analysis and description of specific instances of humor, whether linguistic, visual or performative, although interpretive studies will progress at least to Stage 2. Stage 2 relates to research concerning how and by whom humor is communicated, experienced and responded to, such as pragmatics, performance and audience studies. Studies of habitual patterns of HUMOR USE and consumption by individuals and organizations will relate not only to Stage 2 but

also to Stage 3. Studies of humor interventions and the impact of using humor (e.g., in advertising, politics, the workplace, stress-related occupations and healthcare environments) will focus more immediately on Stage 3. Some research will connect with all three stages, such as that concerning the creative work of individual comedians or artistic trends in humor (e.g., Fry and Allen 1976; Lockyer and Pickering 2005). Similarly, studies of the history and cultural context of humor will engage with the modifying factors affecting every stage of the schema. Studies of LAUGHTER and SMILING, however, relate principally to Stage 2's final phase, 'Humor recipient responses.' Although humor and laughter are normally linked phenomena, each can occur without the other. The schema readily allows for humor without laughter, but some non-humor-related laughter such as the laughter of embarrassment lies beyond the scope of this model. As readers progress through the schema, they are invited to reflect on the likely primary location for their own thinking and research.

4 Stage 1: creating the humor

The initial stage of the humor transaction addresses the process by which humor potential converts to an actual humor product. It is designed to accommodate the almost unlimited range of possibly contributory elements and components and the resultingly large range of humor products. Reading Figure 1.1 top down, from section 1A to section 1C at the bottom, and moving from the general to the more specific, it allows for the modes of human communication and the elements, forms and techniques found in humor that have been identified in various theoretical accounts of humor and analytical studies of humor products, and finally for the nature of any specific piece of humor.

4.1 Classing the potential components of humor

Humor creation can employ all the modes and media found in human communication. Simplifying greatly, this embraces actions and movements (those of humans, animals and objects); gestures (both meaningful and nonsensical); words and sounds (written, spoken and onomatopœic e.g., a fart-noise); symbols and images (still and moving); and sensory stimuli such as smells and touch. All can be mediated either by direct human agency or indirect such as print, visual arts, audiocast and electronic media (Heath and Bryant 2013). These modes and media of communication form the first of the schema's principal groupings for humor potential.

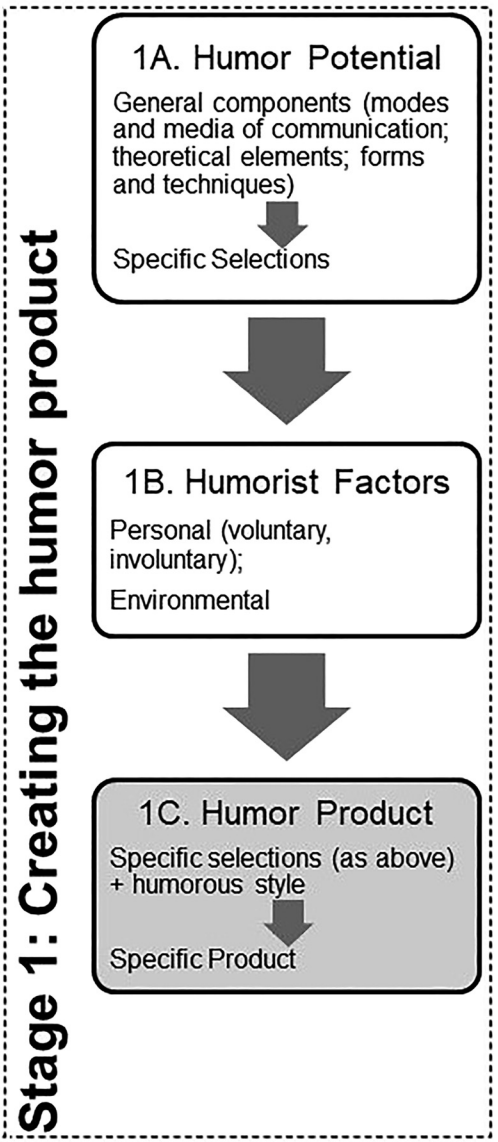

Figure 1.1: The humor transaction schema, Stage 1.

The second grouping comprises elements that go to make up humor. Of these, the first and major sub-group is drawn from the so-called classical HUMOR THEORIES, i.e., the elements of INCONGRUITY, SUPERIORITY, and the RELIEF (festive release) that is provided by

humor's essential non-seriousness and transgressive rule-breaking, which often involves the selection of a normally taboo target for humorous attack (Barber 2011 [1967]; Bucaria and Barra 2016; Chafe 2007; Zijderveld 1983). Although two of these elements are functional (expressing superiority and affording relief) while the other is structural (incongruity), they all occur so commonly in humor as to justify grouping them together here as principal elements (Nijholt 2018). Other potential components come from two further sub-groups: forms (formats) and techniques.

Forms will include recognized comic genres both large and small, such as the comic novel, stand-up comedy, screwball comedy-films, farce, friendly banter, the practical joke and parody. Although genre is a contested term and comprises both formal and stylistic elements, many kinds are commonly accepted in ordinary usage. Often, individual examples are not pure and shade into another genre as they progress, just as in real life interpersonal exchanges of humor can change their form and tone (e.g., romantic comedy becoming farce; friendly banter turning into abusive sarcasm). Some formal humor structures like jokes, memes and cartoons can either be classed as genres or defined by their specific form. Longer humor products often deliberately combine genres, structures and tonalities (e.g., episodes of broad comic relief in Shakespearean tragedy, see Ornstein 1994; transitions within a comic novel, see Lloyd Jones 2009; Noonan 2013).

Subdivisions within genres and even structural groups often overlap. Cartoon for example is a term that subsumes such varied forms as strip cartoon, single-frame cartoon, cartoon series, animation and even video mash-up and pastiche (Chen et al. 2018). Some cartoons are (almost) wholly visual, others depend on a caption and/or a title, even if their picture does not include words or other semiotic elements. A useful formal defining element for cartoons is the visual border or frame, but occasionally this is omitted and needs to be imputed by the viewer; and this element is perhaps more relevant to print than video. It serves as a visual reification of the more general 'play-frame' withion which all humor seeks to take place (Chafe 2007; Handelman 2006 and see Section 5.2). Other clearly recognizable forms/genres of humor include nonsense verse, humorous advertisements, comic greeting cards, playful T-shirt logos and Internet memes. Shorter linguistic forms include the pun, the joke—termed the 'fruit-fly of humor research' by Kuipers (2008: 387) and others—wordplays, nick-names and the comic anecdote or 'shaggy-dog tale.' This is by no means an exhaustive list as inventive humorists coin new ones every day; but it serves to illustrate the range of forms relevant to Stage 1.

Within these larger possible forms, smaller internal structures repeatedly crop up in humor such as parallel plots, happy-endings, repetition, inversion, predictability and surprise. Some of these come close to characterizing a genre (e.g., romantic comedy with its happy ending; parody repeating the model it imitates and usually ridicules). Recurring patterns feature in Bergson's theory of the mechanical in humor (Bergson

2005 [1910]) which describes humor's dependence on doubled or inverted plot-lines, word-play and double-entendres, the reification of metaphor and exaggeration and simplification in character and dialogue. Beyond Bergson, as many as forty-five such specific devices and themes have been identified in the language, logic, identities and visual aspects of humor (Berger 1995: 54–55); doubtless there are more.

External and internal formal elements shade into the aesthetic and rhetorical techniques that are available to humor, such as the use of irony, ambiguity, nonsense, comic naming, word-play and witty dialogue, metaphor made concrete, and the depiction of comic characters via simplified caricature and stereotypes (although humor also embraces complex and empathetic characters e.g., in comic novels and romantic sitcoms). Simplifying greatly, comic characters can be divided (in French playwright Georges Feydeau's immortal words) into 'those who deliver kicks to the backside and those who receive them.' While Feydeau noted that 'it is the latter who have the leading role, because they create the laughter' (quoted in Lorcey 1972: 141, trans. Milner Davis), both types are essential to humor, i.e. the unsympathetic as well as the sympathetic.

Drawing on these three broad categories of theoretical elements, forms and techniques, any specific instance of humor will be comprised of a selection from each, made first at the general and then the specific level. The vast range of possible combinations is what permits the infinite variety found in humor products, even in reiterations of very traditional jokes which can alter significantly with only a slight change in one aspect.

4.2 Personal creative and environmental factors for the humorist

In arriving at a particular combination to form humor—or when that occurs naturally—the humorist will be affected by a number of factors that will modify the process of humor creation. For convenience, the schema classes these under ENVIRONMENTAL FACTORS and PERSONAL (CREATIVE) FACTORS (see Figure 1.1, 1B), despite the somewhat arbitrary nature of this distinction as noted above. In reality, the two classes overlap and interact. Here, environmental identifies things that are largely involuntary e.g., chance, time, place, situation and also bodily state (Ruch 2005; Thompson et al. 2004), as well as the humorist's mood (Deckers 2007). One important creative factor is HUMOR PRODUCTION ability which is personal (Luria et al. 2018), can be developed by personal choice (McGhee 2010), but is involuntary as far as it concerns trait-like individual differences (Feingold and Mazzella 1993; Ruch and Heintz 2019). Another is gender which may be less malleable regarding humor creation and use (Kotthof 2006). Some voluntary personal factors include the humorist's intentions to seek out humor and decisions to use a

relevant skillset and/or to improve it by practice or training. Factors that are both voluntary and involuntary include acquired aesthetic taste in humor (HUMOR TASTE CULTURE, Kuipers 2015 [2006]) and the humorist's own evolving pattern of using humor in daily life (HUMOR STYLE in the sense used in psychology, see Sections 4.3 and 5.3). In conclusion, all factors under the humorist's control are deemed voluntary; all factors out of his or her control involuntary. Notably, certain factors—such as mood—may be involuntary in one event and voluntary in another (e.g., when the humorist deliberately adopts a certain mood for a performance of humor).

The cumulative interplay between factors will influence the humorist's actions in perceiving and creating humor and any specific combination of humor potential must pass through their impact to take shape as a realized humor product. Once evaluated by the humorist (as suitable or not), this product will likely move on to be communicated to a wider audience in Stage 2. If, however, it is humor that has occurred accidentally to the humorist, Stages 1 and 2 are collapsed: the humorist and the humor recipient of Stage 2 are identical and the only creative act is effectively observation. Nevertheless, if the humorist subsequently rehearses or polishes that observed product to share with others, the humor transaction will move forward again into Stage 2. Most commonly, Stages 1 and 2 are distinct.

4.3 Classing humor products

The close of Stage 1 (Figure 1.1, 1C) captures the nature of the specific humor product that has been arrived at by the humorist's creative acts. To the components selected from the classes of humor potential outlined above in Figure 1.1, 1A, a special emphasis is now added on the tonality or aesthetic 'flavor' of the product. This is designated as HUMOROUS STYLE rather than as either COMIC STYLE or HUMOR STYLE, since both of these two terms have been appropriated by psychological humor research with a rather different meaning.[1] Humorous style captures the humorist's creative intentions in shaping the specific humor product from the selection of potential elements.

1 Aesthetically speaking, comic style and humor(ous) style are interchangeable terms, but their meaning in that context is quite distinct from how they are now widely used in psychological studies where humor style denotes the way an individual employs humor ('styles of humorous conduct' Craik et al. 1996; introduced by Martin et al. 2003; developed by Ruch et al. 2018). Further confusing the issue, a short version of the literary spectrum of comic style (based on an English word-map created by Schmidt-Hidding 1963) has recently been adopted to assess the styles that people habitually display in everyday life (see 'comic styles' use by Ruch et al. 2018, and also comment by Hempelmann 2017). For clarity, this article adopts the term humorous style to denote the flavor, tonality or comic style of a humor product, not the way that it and others are used by the humorist. This confusion is discussed further in Appendix A: Glossary (see relevant entries).

Style as a literary term identifies the nature or 'flavor' of an artistic product, including that of comedy and humor generally. It often describes a specific comic genre e.g., farcical style characterizes farce and slapstick; 'sick' humor is the unpleasant flavor of a dead baby joke; satire is the comic animus of a political cartoon; 'black,' existential 'gallows humor' is the bleak humor that can be found in the face of despair; and tragicomic style is the flavor created by combining tragedy with comedy (Milner Davis 2014). Simplifying greatly, these humorous styles range from black and bitter humor lacking any empathy for its targets to humor with a rosy world-view that gently tolerates comic folly. At the 'black' end of the spectrum are humorous styles with a serious, corrective or critical message (either about individuals or society at large) such as sarcasm, satire and intentionally aggressive humor. Narrower specialist styles such as absurdist humor and dada move away from this 'black' end towards the middle since some examples are nihilist but cheerful (e.g., performances by American artist Andy Kaufman, 1949–1984; the novels of Alfred Jarry in France and Laurence Sterne in England (Noonan 2013) or the work of the British 'Monty Python' team) while others are nonsensical but corrective (e.g., Samuel Beckett's *Waiting for Godot*, 1953). Both satire and absurdism contain strong elements of superiority as well as incongruity, noting that especially in absurdism incongruities usually remain unresolved (Oring 2003).

The mid-spectrum is characterized by non-serious playful delight in transgression and rule-breaking as in farcical slapstick or verbal humor employing paradox, nonsense and wordplay. The provocative transgression of ethnic and other 'put-down' jokes may be located here if it lacks critical bite or dislike (e.g., teasing employed by American adolescents interacting around issues of ethnicity and race, Douglass et al. 2016). At the roseate end of the scale is humor in its narrow sense, gentle, self-reflexive and tolerant, possessing empathetic comic victims and romantic comedy's traditionally festive happy ending. Each humorous style conveys a different message about its nature and purpose from its creator (the humorist) to its audience (the humor recipient/s). These messages vary from savage criticism of an injustice or an absurdity demanding reform to resigned amusement at the world and its follies. In interpersonal exchanges of humor, the stylistic message ranges similarly from unpleasantly sarcastic to purely entertaining.

By selecting one style rather than others for a humor product, the Stage 1 humorist determines its aesthetic aspect. In 1936, George Orwell opted to write the light-hearted social critique of British mores, *Keep the Aspidistra Flying*. This is very different from his later novel, *1984* (written in 1949), a satire so bleak that there is almost no humor in it (Condren et al. 2008: 403). Similarly, in crafting a joke or a cartoon, a humorist may give preference to a light-hearted style rather than something more disturbingly edgy. As noted above (Section 4.2), apparently volitional decisions like these are also shaped by more involuntary personal and social factors

such as the humorist's evolving taste and motivations for engaging with humor. However, like other artists, humorists can also find that the creative act imposes its own decisions, with the material seeming to shape itself. In summary, any individual humor product will comprise via complex processes that are partly voluntary and partly happenstance the humorist's personal selection of formal elements, modes and media of communication, plus a particular aesthetic flavor and its humor message.

Despite this and importantly, the humorous style of any product is greatly affected by the process of communication to an audience, especially when that involves the humorist as interpreter or performer of another's humor product. Thus, the final nature of the humor product experienced by the humor recipient is determined not in Stage 1 but in Stage 2, 'Communicating and experiencing the humor.' This stage also provides the transition to the functions and roles that humor can play in daily life.

5 Stage 2: communicating, experiencing and responding to humor

Transmission of the humor product takes place between the communicating humorist and an audience. Both parties are affected by various personal and environmental factors and there are both short-term and long-term responses to the humor. The latter are addressed in Stage 3, but Stage 2 captures the recipient's initial processing of the stimulus via HUMOR DETECTION, HUMOR COMPREHENSION and HUMOR APPRECIATION (or not), and a wide range of possible short-term RECIPIENT HUMOR RESPONSES.

In Stage 1, the humorist prepared the humor product, most likely for sharing with others (for the exceptional case, see Section 4.2). In Stage 2, the product acts as a stimulus to induce the experience of humor in others. This stage also allows for a change of identity in the humorist from the previous creative stage (e.g., a comedian interpreting a pre-prepared script or someone retelling a joke they have heard or read). There may also be two or more communicating humorists in Stage 2: this is especially likely in professional entertainment where comedians perform a text or in musical humour (e.g., the 20th century duo of musical parodists, Flanders and Swan). Transmission starts with the completed humor product and its specific components from Stage 1 (Figure 1.2, 2A) and moves down through the mediating factors that influence both how the humorist communicates and how the audience experiences the humor (2B). The stages and nature of that experience and the range of possible immediate recipient responses are summarized in 2C.

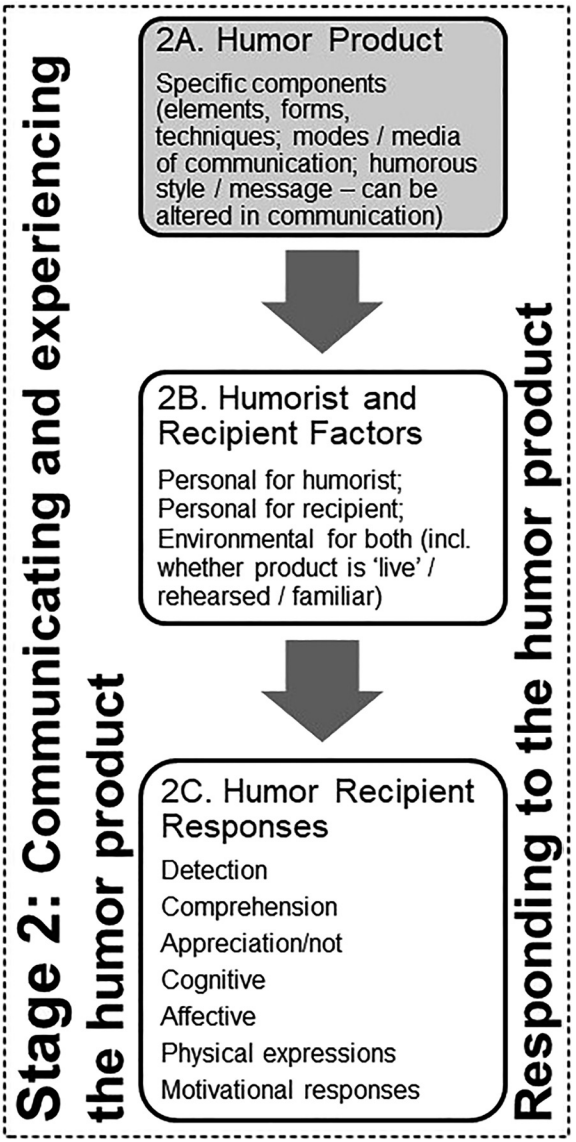

Figure 1.2: The humor transaction schema, Stage 2.

5.1 Communicating the humor product

Stage 2 communication allows the humorist to vary the modes and media of communication built into the original humor product. A Stage 1 written text for example can be delivered orally rather than read by its audience and a still image can be animated. Even the simplest humor product is affected in this way by its transmission. The humorous style of a text or image read or viewed in silent isolation (e.g., a book, audio-visual meme on the Internet, exhibit in an art gallery or a film clip) changes subtly when it is spoken aloud (perhaps with 'accents added,' as actors say) and also when it is viewed in company (Hanich 2017). This is especially so when it is delivered to a live audience whose participation in improvised humor can amount to co-creation (or alternatively 'squelching') of the humor product, as any stand-up comedian will attest (Double 2005; Landert 2021). The webinar experience has reinforced this by underlining the difference between a recorded and a live lecture. Pre-recorded TV comedies and video mashups will differ experientially for a live audience in the recording studio and for telecast watchers.

Even without audience input, 'live-ness' allows interpretive choices to be made by the communicating humorist, whether deliberately or accidentally. A more serious meaning can be added or the degree of empathy for the humor's target altered. Structural changes may be made to accommodate a particular audience or context (e.g., shortening up a joke told in the workplace as opposed to elaborating it at a party). Such changes affect the nature and style of the humor product and will therefore impact subsequent recipient humor responses (see Figure 1.2, 2C, and Section 5.3 below).

Making the humor more aggressive and disparaging can increase the risk of rejection (Graefer and Das 2017). The difference between friendly teasing and sarcastic put-downs in conversational humor between friends and co-workers is often not in the words but the delivery (Holmes and Stubbe 2015). If a humorist misreads the recipient/s and selects the wrong humor product or delivers it badly, the result is failed humor (Bell 2015; Kuipers, this volume). Increasingly today, differing moral stances between humorist and recipient on topics such as inclusiveness and party politics result in humor giving offence or being rejected (Lockyer and Pickering 2009). The importance of such attitudinal differences has led to the development of a psychological testing instrument to identify corresponding traits in the appreciation of humor (Strauts and Blanton 2015). The nature of the rapport between humorist and recipient is thus vital (Dore 2018): if the humorist is unable to overcome potential mistrust or emerging dislike, communication is disrupted and audience response affected. However, other causes of failure are not necessarily within the control of the humorist but

concern the sequence of humor detection and comprehension by the recipient (i.e., their personal factors, see Sections 4.2 and 4.3).

Whether or not the humor product succeeds with its audience is thus determined in Stage 2, not Stage 1. For humor not to fail, the successful alignment of many different things is required. A poor humor product (as judged by the humorist) resulting from Stage 1 can still be successfully transmitted in Stage 2; but even a fine one depends importantly on the communicating humorist's own HUMOR COMPETENCE (i.e. ability, and training). This concept was identified in humor audiences by Carrell (1997b) but is equally applicable to humorists. Everyone has experienced 'fluffing' the retelling of a familiar joke. A humorist's willingness to rehearse and polish both product and delivery is especially vital in extreme comic forms such as slapstick. Making comedy out of bodily pain such as being kicked in the butt depends on skill in 'pulling off physical stunts or demonstrating levels of physical agility well beyond anything that the viewer could hope to achieve' (Peacock 2014: 33). Rehearsal and familiarity with the product as well as 'live-ness' are thus among the key personal and environmental factors that affect Stage 2 (see Figure 1.2, 2B).

Surprise is often regarded as an essential ingredient of humor, especially in resolving incongruity (Chan et al. 2013; Suls 1977; 1983). While the ability to 'spring it' on the audience is an important aspect of a humorist's skill, surprise bears a complex relationship to humor. From the humorist's point of view, rehearsal and repetition decrease surprise but enhance delivery skills and thus increase the likelihood of positive HUMOR RESPONSES. Surprise can increase recipient enjoyment but so also can fulfilled expectations and humor often has predictably happy endings. Enjoyable predictability explains why lame jokes (including 'dad jokes,' see Cai et al. 2019) can succeed: they typically receive the groan response combines pleasure with contempt. A well-known joke lacking any surprise can provoke the response 'I've heard that one,' but also sometimes, 'I love that one, tell it again.' This accords with Hollingworth (1911)'s early distinction between 'waxing' jokes (rated funnier upon repetition) and 'waning' ones (rated less funny upon repetition). Surprise and predictability are thus both important ingredients for humor, present in both Stage 1 and Stage 2.

The factors of gender and status apply to both humorist and recipient/s and are both personal and environmental. Studies of contemporary gender roles suggest that men and women will behave differently as humorists, depending in part on whether they are using humor in same-sex or mixed-sex groups—although there are wide individual variations and differences are subject to cultural influence. In mixed-sex groups, men tend to produce more humor and women to be more passive appreciators of humor (Hofmann et al. 2020; Greengross et al. 2020; research on gender effects is extensive, see HUMORIST AND RECIPIENT FACTORS in Glossary). Although responses may also be gendered, variations between persons of the same gender may be larger than similarities across the gender. But in most cultures, depending on status but

regardless of gender (see e.g., Kim and Plester 2019), recipients can 'return serve' as part of their reception of humor, transforming themselves into humorists and the humorist into recipient in a game of banter or witty exchange. This response moves the action into Stage 3 of the schema.

Personality traits and social circumstances (personal factors) influence both humorist and recipient in exchanging humor, but outcomes will also be modified by external factors such as chance, time and place, size and composition of the audience and relevant social and hierarchical relationships (e.g., in-group/out-group, professional or private relationships). Whether the location is the workplace, an entertainment venue or with family and friends, the exchange of humor is always a social process. It is therefore subject to cultural norms and power relations between humorist, recipient and the wider audience (Holmes 2000; Kuipers 2009). Elements of superiority and relief apply for both parties in the transmission of humor: the humorist dominates in initiating the exchange, the recipient controls the response and shares vicariously in the humorist's superior knowledge when the humor products communicated; and there is relief from tension for both provided by the humor.

5.2 Experiencing the humor product

To experience humor requires first and foremost an ability to detect and comprehend the material presented (Figure 1.2, 2C). Neuropsychological studies of the cognitive processing of humor (e.g., Goel and Dolan 2001; Moran et al. 2004; Wild et al. 2003) have identified several steps in experiencing humor. The first is detecting it and recognizing a given stimulus as being humorous (humor detection). Brain-scan research across several language groups (Hofmann and Rodden 2019) has validated that this is distinct from and precedes the phase of comprehending what the stimulus signifies and why it is humorous (humor comprehension). Humor detection is subject to cultural factors such as taste in humor and politeness norms but can be improved by training (McGhee 2010).

For humor comprehension, besides general intelligence, shared cultural knowledge is vital ('knowledge resources' in the General Theory of Verbal Humor, see Attardo 2001; Raskin 2008). If the humor product contains references that are not understood by the recipient, then successful communication is much less likely. Even if a parody is well-performed for example, its humor may fail to be understood because the recipient does not recognize the original model. When both detection and comprehension succeed, then recipients will likely demonstrate a response to the humor, although any may of course choose to control or withhold some or all signs of response (see Section 5.3).

An important factor affecting both humorist and recipient in this stage of the transaction is the presence or absence of a shared ritual playframe (Bateson 1972; McGhee 1979), or a shared paratelic (i.e., activity-oriented but playful) motivational state ('non-seriousness,' according to Chafe 2007). Raskin (2008)'s non-bona fide mode of communication relates to this but a playframe goes beyond linguistics and is both an environmental and personal factor. It is a shared ritual state, as Alexander (2004) noted, combining Bateson's frame analogies from mathematics and artwork with concepts from theatre and sociology. A playframe conveys the message that the ritual taking place within it is 'of greater value than the mundane, the not-ritual from which it separates' and which it shapes by 'orientating cognition and feeling' (Handelman 2006: 572–3). Establishing a playframe both liberates and confines its participants and is accepted more easily when time, location and social setting are already designated as appropriate for humor. In Japanese culture, this concept is termed a *warai-no-ba* ('laughter time/space,' see Oda 2007) and is traditionally delimited to specific instances. Other cultures such as that of contemporary Australia allow a playframe at virtually any time (Milner Davis 2009).

Predictably, cultural differences greatly affect the communication of humor (Chen et al. 2013; Dore 2018). It follows that a culture that gives extremely wide permission for the use of humor, even with social superiors, can cause communication problems for those unfamiliar with its conventions. For example, Australian tourism operators habitually use humor in a way that requires explanation for visitors from more formal cultures (Pearce and Pabel 2015). Canadian students consider humor and laughter in the classroom to be far more appropriate forms of behavior than do Mainland Chinese students (Chen and Martin 2007). Initiating humor with persons of higher status than oneself is a strong cultural variable between Hong Kong and New Zealand (Schnurr and Chan 2009) and between Singapore and Australia (Wise 2016; Wise and Velayutham 2019). The presence of alcohol or other mood-altering drugs can positively influence laughter and other humor responses in some cultures but not others (e.g., Lowe and Taylor 1997).

An extreme case of cultural variance is found amongst a tribe who struggle to survive on the borders of the Sahel Desert, the Ik, who have evolved an adaptive custom of laughing heartily when death and disaster strike their weakest (oldest or youngest) members (Handelman 1998). Other modern cultures would reject such a response with horror, although it was not unknown in the ancient world (Kazantzidis and Tsoumpra 2018). As Lewis puts it, 'humor can either draw people together or push them apart' (Davies et al. 2008: 12). Having taken all such modifying factors into account, the humor transaction schema moves on to focus on the recipients themselves and their humor responses.

5.3 Recipient humor factors and responses

From the 1970s, 'humor' as a research term has customarily been applied to the appraisal of humor (perceiving something as funny) as well as to the HUMOR STIMULUS and sometimes also to behavioral responses (smiling and laughter). As noted above, more recent research distinguishes between all these and acknowledges the full range of cognitive, affective, physical and motivational expressions involved in responding to humor (Bell 2015; Goel and Dolan 2001; Hofmann and Ruch 2023; Mobbs et al. 2003). These aspects of response are set out in Figure 1.2, 2C.

Both humor detection and humor comprehension plausibly involve evaluation of whether a suitable playframe as described above exists around the humorous communication before any immediate behavioral response can kick in (Ruch and Rath 1993). Appreciation or non-appreciation of the humor product involves affective as well as cognitive responses (Mobbs et al. 2003). Although amusement (or exhilaration, mirth) is the typical emotional response to detected and comprehended humor, 'mixed feelings states' can also result, and the humor can even be perceived as aversive (Ruch et al. 2014; Samson et al. 2011 and see Sections 6.2 and 6.3). Even with a fully positive cognitive and affective appreciation of the humor product, physical responses are not limited to smiling and laughing, but can include groaning and even 'unlaughter,' the deliberate withholding of smiles and laughter (Billig 2005; Marsh 2009).

Responses will be influenced in part by the social and environmental factors already noticed in Sections 5.1 and 5.2 but also by factors such as the composition and size of a recipient group. Laughter is infectious and audience members often laugh simply because others do, as evidenced by the use of canned laughter in TV comedy to enhance audience enjoyment. Even the sound of laughter influences the rating of bad jokes (Cai et al. 2019) and increases in a companion's laughter increase laughter and smiling responses by a humor recipient, as well as participants' ratings of funniness (Chapman and Chapman 1974); while the presence of an artificial companion (avatar) also enhances positive responses (Dupont et al. 2016). Seating position, proximity, crowding, eye contact and age difference between subjects are known to be modifying factors, as is the composition of the group, whether members are strangers or friends and single or mixed sex (Devereux and Ginsburg 2001). Relationship status, personality and companion gender all powerfully enhance the frequency and/or duration of smiling and laughing. Audience or group members (even a recorded studio audience) can provide HUMOR SUPPORT, which is a positive humor response that goes well beyond laughter in encouraging the sharing of humor (Carrell 1997a, 1997b; Hay 2001). The context for communication is also significant, whether it is an informal personal interaction or a more formal live stage or film

screening. This list is by no means exhaustive but illustrates how environmental and personal factors affect not only the humorist but also the recipient.

As well as cognitive and affective responses, the experience of humor produces motivational responses in the recipient. These may be positive or negative, aversive or participatory, and are not always very conscious decisions or actions. Humor is a powerful tool and we often find ourselves drawn into it in a way that is not completely volitional (see also Sections 4.3 and 6.1). As noted above, recipients may feel a desire to express humor support by joining in a humorous exchange (becoming a humorist themselves), by returning banter, swapping a joke with the humorist or heckling a comedian (Double 2005). Alternatively, they may express criticism or rejection of the humor (see HUMOR RECIPIENT RESPONSES in Glossary). A good experience with a particular humor product will likely motivate a search for similar ones; a bad one may motivate the recipient to avoid this particular humorist and type of humor in the future—perhaps even humor in general—or alternatively to search for and use better humor themselves. Whether undertaken consciously or not, these action-choices move the schema on to Stage 3.

6 Stage 3: using and sharing humor

Stage 2 of the schema described a humor recipient's immediate, short-term responses to experiencing a specific humor product. Stage 3 addresses its re-use and a range of longer-term possible impacts on both humorist and recipient. In this stage, the recipient becomes humorist and moves on to develop particular patterns of humor use in daily life.

6.1 Sharing and using humor

Because Stage 3 focuses on longer-term patterns of behavior, the term HUMOR USER is adopted to distinguish the recipient-turned-humorist from earlier stage humorists. The allied term HUMOR USER CHOICES is used here for simplicity, despite the fact that humor-related decisions made by humor users are not always completely volitional. Stage 2 humor recipients move into Stage 3 (Figure 1.3, 3A) when they become humor users. If they enjoyed a humor product and responded to it positively, they will likely be motivated to share it with others; or they may select a different but similar product. Even if the original one was not enjoyed, the recipient may still decide to share it, perhaps intending to see if others enjoy it or perhaps to arouse indignation and/or confirm their own dismissive judgement (see Section 6.2). There is a wide range of purposes for using humor, whether that occurs in a structured discourse

such as stand-up comedy or in the discursive context of an informal conversation, in the recommendation of an amusing book or website or the forwarding of an email. Besides entertaining, humor can change the direction or tone of a discussion, relieve tension, emphasize a point, convey superiority of rank or hierarchy, express resistance or impose control; it may also serve as acknowledgement of a mutually accepted outcome (Holmes 2020; Holmes and Stubbe 2015). It can strengthen a group by both inclusion and exclusion. Any and all of these functions may underlie a decision to use or not to use humor; naturally, those choices will be impacted by the usual range of personal and environmental factors.

6.2 Factors modifying specific humor use

As in the first two stages of the schema, the range of largely involuntary environmental factors applying to any specific use of humor includes chance, time, place, availability and nature of an audience and the humorist's bodily state as well as mood (Figure 1.3, 3B). Relevant personal factors are personality traits, social circumstances, gender (discussed above in Section 4.1), humor production ability and the willingness to develop it by practice and training, and also emerging humor taste. Importantly, degree of political and religious affiliation may affect this taste and thus promote or inhibit the sharing of humor (Saroglou 2002). However, humor that is considered bad (too transgressive) or aversive may be shared, even if it is not approved of, in indignation and/or protest. This kind of sharing may well have wider and damaging results, as was the case for the deliberate international dissemination of the Danish Muhammed cartoons, leading to property damage and even deaths (Freeman et al. 2006). In such a case, the humor user chooses a particular product and uses it to become effectively an anti-humorist.

6.3 Humor's outcomes and impacts

Experiencing and using humor impacts not only on the humor user but also on their audience/s and social circle/s. The crucial variable determining these humor outcomes (Figures 1.3, 3C) is the success or failure of each newly transmitted humor product.

For the humor user, the impact on self is most important: was it a punishing experience, and if so, will it lead to the role of humorist being avoided in the future or to more work being undertaken to improve the humorist's humor-related skills? Or was it a rewarding experience and, if so, more likely to be sought after and repeated? It is also at this stage that choices will be made or reconfirmed about such things as

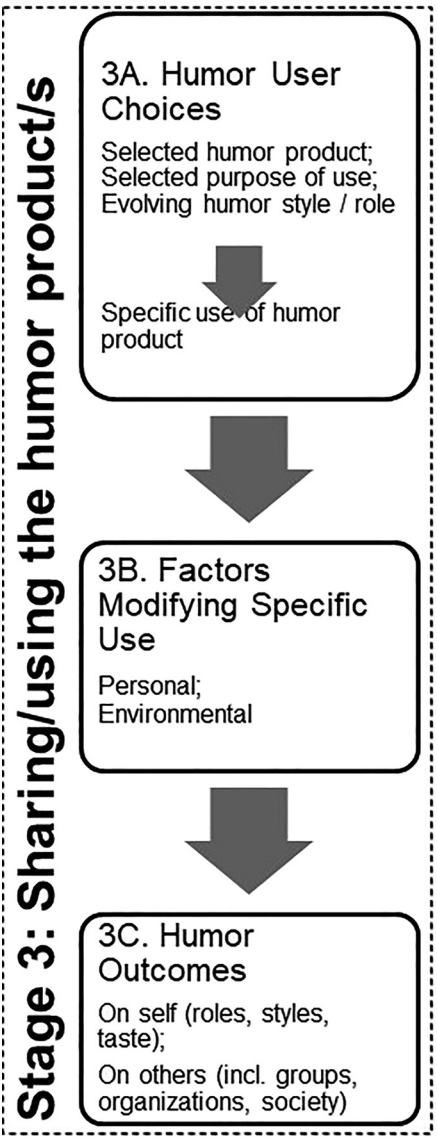

Figure 1.3: The humor transaction schema, Stage 3.

adopting the role of humor producer (humorist) or that of humor consumer (recipient), about continuing to seek out humor, and if so, what kind to prefer and what uses to put it to. Personal taste and humor style in the psychological sense (sometimes referred to as SENSE OF HUMOR) will evolve with each use and also with the

feedback provided by knowing whether the humor has helped or hindered personal interactions.

Since audience members are social partners with the humorist in the humor transaction, their responses will help shape these outcomes. If friends, colleagues or a professional audience have enjoyed being recipients, the humorist's own enjoyment is enhanced, making it more likely that he or she will persist in the chosen humor role, gaining skill with practice. An apparent exception here is the practical joke played upon an unwitting victim (Marsh 2015). For this humorist, the social rewards do not come from the overt humor recipient who is most unlikely to enjoy being the victim of the prank: one might therefore suspect a degree of schadenfreude on the part of the humorist. The rewards do come however from the covert audience of colleagues or friends who, having been let into the secret beforehand, are effectively passive co-humorists or humor supporters who share the humorist's perspective of anticipating the target's entrapment. As Marsh points out, the only immediate defense practicable for victims of practical jokes is to join this laughing crowd and become humorists who laugh at themselves. Later, however, such an experience might led to retaliation by the target turning practical joker/humorist.

Regardless of the undeniable personal satisfaction to be had from poking fun at a suitable target, social feedback from the audience is likely to be the stronger influence on a humorist's attitude towards repeating, altering or improving their selected kind of humor. Each subsequent humor experience, first as a recipient and then as a user, will contribute to the evolution of a particular way of engaging in humor in daily interactions as the humorist explores the satisfaction to be gained by selecting and transmitting humor of a particular type in one environment or another and for a particular purpose. The end results of this process of personal experience and social feedback are firstly, the development of a personal pattern of using humor in one's life ('humor styles' and 'comic styles' as used in psychology) and secondly, the re/production of a personal humor taste, as people learn how to be humorous according to the aesthetic styles and usages appropriate to their individual status and appreciated by their culture and social group.

Over time, individual evolutions in taste create their own feedback so that development of an individual style leads to the re/creation of social styles (Kuipers 2015 [2006], 2009) and vice versa in the process of acculturation. In this way, a particular workplace for example can establish a humor culture all its own, whether that is good for morale and productivity or not (for a somewhat dysfunctional example, see Plester et al. 2022). Evolution of personal humor taste is also influenced by a heritable component of humor preferences and also usage (see e.g., Vernon et al. 2012). Gradually, a humor user will adopt a favored role such as that of a prankster, skilled joke-teller, class clown, humor supporter, tension-diffuser or risk-taker in humor use. The desire to convert personal satisfaction into financial reward may

even lead to creating and performing humor as a writer, stand-up comic or TV personality or to a professional role as humor therapist or hospital clown.

Whether professional or private, these roles will affect the lives of those around the humorist, moving outwards from immediate family and social circle to classroom and workplace culture. Whether as a workplace joker, professional performer, cartoonist or hoaxer, any humorist will have an impact on society at large—not just in terms of morale or economics, but culturally and indeed sometimes politically (e.g., humor used to express a point of view in resistance movements, see Takovski 2020). Humor's cumulative impact can transform audience attitudes and social norms positively: witness the growing numbers of stand-ups who successfully celebrate their personal disabilities (Lockyer 2015) and the impact of so-called ethnic comedians (for a US example, see Avila-Saavedra 2011). Research on humor used in advertising also demonstrates a positive impact on brand attitude, given various provisos and qualifications (Gulas and Weinberger 2006; Strick et al. 2013). In its satiric and critical mode, humor has been used effectively if not always fairly as rhetorical persuasion in both politics and legal courts since the time of the Romans (for a modern survey on humor in American law courts, see Hobbs 2007). In other cases, broader social impact is possible but likely qualified, e.g., whether political satire can change voter intention and if so, how (Baumgartner and Morris 2006; Boukes et al. 2015; Boukes 2018; Phiddian 2018), or contribute to regime collapse (Davies 2007; Laineste 2009; Takovski 2020).

For good or for ill, humor does impact the wider sphere. Whenever the humorist creates and shares a new humor product, Stage 3 will cycle back to Stage 1 (see Figure 1) to progress once more through the full humor transaction schema. Every repetition will either reinforce pre-existing patterns of impact or negate them to some extent, depending on the outcomes for both humorist and audience. Stage 3 is most relevant to studies of personal humor style in both the aesthetic and psychological senses and to those focusing on the personal and social effects of using humor (e.g., studies of gelotophobia and DISPOSITIONS TOWARDS RIDICULE AND LAUGHTER, evaluation of humor therapies, survival and resistance humor and the longer-term effects of humor and satire on audiences and in the workplace etc.). Some of these studies will also connect with other stages because of the cyclical effect of humor use (e.g., Platt et al. 2016). Cross-cultural studies of humor may well find a fruitful point of comparison in the focus upon personal experience highlighted in Stage 3. Nevertheless, it must be acknowledged that insight into humor is to be found as much in the linkages and areas in between the designated stages as in the specific categories outlined in the humor transaction.

7 Summary and conclusions

The conceptual approach taken in this article does not pretend to explain *why* humor is humorous but to outline *how* it is created, communicated, reacted to and (re)used and with what outcomes. Because it provides a wholistic (if greatly simplified) overview of this multi-party transaction, it offers an inclusive way of organizing the vast scope of studies into humor and laughter, hopefully assisting humor researchers and practitioners to locate and therefore relate their disparate studies within its framework. The schema aims to incorporate insights and research findings from as many disciplines contributing to the study of humor and laughter as possible. It stresses that creating, communicating and experiencing humor is a complex transaction between humorist and humor recipient with complex outcomes but one that can usefully be seen as taking place in sequential stages.

In summary, the humor transaction schema proposes that research focusing on any aspect of humor should take account of the wide variety of media, modes of communication, elements, forms, themes, tropes, techniques, 'flavors' (styles) and purposes that humor employs and of the equally wide range of personal and environmental (voluntary and involuntary) factors that apply to humor's creation and use. Attention should be paid to the varying social and cultural codes affecting both humorists and recipients of humor and also to the fact that humor's effects are social as well as personal, that is, to the fact that humor has consequences. Humor is rewarding, or we humans would not be drawn to it and wish to repeat the experience; but researchers also know that it can be misunderstood or rejected as inappropriate and offensive. For some people, it can even be aversive. By opting for a very general system of classification and grouping, this model of how humor unfolds and with what outcomes embraces all these disparate elements and possibilities. Hopefully it will prove sufficiently adaptable and robust to accommodate the full spectrum of research past, present and future, into humor's three stages of creation, communication and use.

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